



SEQUENCE LISTING

<110> Yuan, Chong-Sheng  
Datta, Abhijit  
Wang, Yuping

<120> METHODS AND COMPOSITIONS FOR  
DETERMINATION OF GLYCATED PROTEINS

<130> 466992001300

<140> 10/622,893

<141> 2003-07-17

<160> 23

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> 40%-100% identity to leader sequence

<400> 1

Met Gly Gly Ser Gly Asp Asp Asp Asp Leu Ala Leu  
1 5 10

<210> 2

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> FAD cofactor-binding consensus sequence

<221> VARIANT

<222> 2, 4, 5

<223> Xaa = Any Amino Acid

<400> 2

Gly Xaa Gly Xaa Xaa Gly  
1 5

<210> 3

<211> 437

<212> PRT

<213> Artificial Sequence

<220>

<223> 40%-100% identity to the amadoriase

<400> 3

Ala Val Thr Lys Ser Ser Ser Leu Leu Ile Val Gly Ala Gly Thr Trp  
1 5 10 15



<400> 4  
 Lys Gly Glu Leu Glu Gly Leu Pro Ile Pro Asn Pro Leu Leu Arg Thr  
 1 5 10 15  
 Gly

<210> 5  
 <211> 472  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> chimeric protein

<400> 5  
 Met Gly Gly Ser Gly Asp Asp Asp Asp Leu Ala Leu Ala Val Thr Lys  
 1 5 10 15  
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 20 25 30  
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 35 40 45  
 Pro Tyr Pro Val Pro Ser Ala Ile Ser Ala Gly Asn Asp Val Asn Lys  
 50 55 60  
 Val Ile Ser Ser Gly Gln Tyr Ser Asn Asn Lys Asp Glu Ile Glu Val  
 65 70 75 80  
 Asn Glu Ile Leu Ala Glu Glu Ala Phe Asn Gly Trp Lys Asn Asp Pro  
 85 90 95  
 Leu Phe Lys Pro Tyr Tyr His Asp Thr Gly Leu Leu Met Ser Ala Cys  
 100 105 110  
 Ser Gln Glu Gly Leu Asp Arg Leu Gly Val Arg Val Arg Pro Gly Glu  
 115 120 125  
 Asp Pro Asn Leu Val Glu Leu Thr Arg Pro Glu Gln Phe Arg Lys Leu  
 130 135 140  
 Ala Pro Glu Gly Val Leu Gln Gly Asp Phe Pro Gly Trp Lys Gly Tyr  
 145 150 155 160  
 Phe Ala Arg Ser Gly Ala Gly Trp Ala His Ala Arg Asn Ala Leu Val  
 165 170 175  
 Ala Ala Ala Arg Glu Ala Gln Arg Met Gly Val Lys Phe Val Thr Gly  
 180 185 190  
 Thr Pro Gln Gly Arg Val Val Thr Leu Ile Phe Glu Asn Asn Asp Val  
 195 200 205  
 Lys Gly Ala Val Thr Gly Asp Gly Lys Ile Trp Arg Ala Glu Arg Thr  
 210 215 220  
 Phe Leu Cys Ala Gly Ala Ser Ala Gly Gln Phe Leu Asp Phe Lys Asn  
 225 230 235 240  
 Gln Leu Arg Pro Thr Ala Trp Thr Leu Val His Ile Ala Leu Lys Pro  
 245 250 255  
 Glu Glu Arg Ala Leu Tyr Lys Asn Ile Pro Val Ile Phe Asn Ile Glu  
 260 265 270  
 Arg Gly Phe Phe Glu Pro Asp Glu Glu Arg Gly Glu Ile Lys Ile  
 275 280 285  
 Cys Asp Glu His Pro Gly Tyr Thr Asn Met Val Gln Ser Ala Asp Gly  
 290 295 300  
 Thr Met Met Ser Ile Pro Phe Glu Lys Thr Gln Ile Pro Lys Glu Ala  
 305 310 315 320  
 Glu Thr Arg Val Arg Ala Leu Leu Lys Glu Thr Met Pro Gln Leu Ala  
 325 330 335  
 Asp Arg Pro Phe Ser Phe Ala Arg Ile Cys Trp Cys Ala Asp Thr Ala  
 340 345 350  
 Asn Arg Glu Phe Leu Ile Asp Arg His Pro Gln Tyr His Ser Leu Val  
 355 360 365

Leu Gly Cys Gly Ala Ser Gly Arg Gly Phe Lys Tyr Leu Pro Ser Ile  
 370 375 380  
 Gly Asn Leu Ile Val Asp Ala Met Glu Gly Lys Val Pro Gln Lys Ile  
 385 390 395 400  
 His Glu Leu Ile Lys Trp Asn Pro Asp Ile Ala Ala Asn Arg Asn Trp  
 405 410 415  
 Arg Asp Thr Leu Gly Arg Phe Gly Gly Pro Asn Arg Val Met Asp Phe  
 420 425 430  
 His Asp Val Lys Glu Trp Thr Asn Val Gln Tyr Arg Asp Ile Ser Lys  
 435 440 445  
 Leu Lys Gly Glu Leu Glu Gly Leu Pro Ile Pro Asn Pro Leu Leu Arg  
 450 455 460  
 Thr Gly His His His His His His  
 465 470

<210> 6

<211> 1419

<212> DNA

<213> Artificial Sequence

<220>

<223> nucleotide sequence encoding a chimeric protein

<400> 6

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tataccaacg ttaccgtgct ggacccctat cctgtcccta gcgccatctc cgccggaaac 180
gacgtgaaca aagtcattag cagtggccaa tattcgaata acaaagacga aatcgaagtg 240
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gttcagtatc gtgatatttc caagctgaaa ggagagttgg aaggtaagcc aatccctaac 1380
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<210> 7

<211> 39

<212> PRT

<213> Artificial Sequence

<220>

<223> sequence homology between the N-terminal sequence of Amadoriases Ia

<221> VARIANT

<222> 12

<223> Xaa = C or T

<400> 7  
 Ala Pro Ser Ile Leu Ser Thr Glu Ser Ser Ile Xaa Val Ile Gly Ala  
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 Gly Thr Trp Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly  
 20 25 30  
 Gly Gly Gly Gly Gly Gly Gly  
 35

<210> 8  
 <211> 39  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Sequence homology between the N-terminal sequence of Amadoriase Ib

<400> 8  
 Ala Pro Ser Ile Leu Ser Thr Glu Ser Ser Ile Ile Val Ile Gly Ala  
 1 5 10 15  
 Gly Thr Trp Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly  
 20 25 30  
 Gly Gly Gly Gly Gly Gly Gly  
 35

<210> 9  
 <211> 39  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Sequence homology between the N-terminal sequence of Amadoriase Ic

<400> 9  
 Ser Thr Glu Ser Ser Ile Ile Val Ile Gly Ala Gly Thr Trp Gly Cys  
 1 5 10 15  
 Ser Thr Ala Leu Leu Leu Leu Leu Leu Leu Leu Leu Leu Leu Leu Leu  
 20 25 30  
 Leu Leu Leu Leu Leu Leu  
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<210> 10  
 <211> 39  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Sequence homology between the N-terminal sequence of Amadoriase II

<400> 10  
 Ala Val Thr Lys Ser Ser Ser Leu Leu Ile Val Gly Ala Gly Thr Trp  
 1 5 10 15  
 Gly Thr Ser Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr  
 20 25 30  
 Thr Thr Thr Thr Thr Thr Thr  
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<210> 11

<211> 7  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> exemplary epitope tag

<400> 11  
Asp Tyr Lys Asp Asp Asp Lys  
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<210> 12  
<211> 9  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> exemplary epitope tag

<400> 12  
Tyr Pro Tyr Asp Val Pro Asp Tyr Ala  
1 5

<210> 13  
<211> 11  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> exemplary epitope tag

<400> 13  
Cys Gln Asp Leu Pro Gly Asn Asp Asn Ser Thr  
1 5 10

<210> 14  
<211> 10  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> exemplary epitope tag

<400> 14  
Glu Gln Lys Leu Ile Ser Glu Glu Asp Leu  
1 5 10

<210> 15  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> exemplary epitope tag

<400> 15  
His His His His His His  
1 5

<210> 16  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> exemplary epitope tag

<400> 16  
Asp Thr Tyr Arg Tyr Ile  
1 5

<210> 17  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> exemplary epitope tag

<400> 17  
Glu Tyr Met Pro Met Glu  
1 5

<210> 18  
<211> 11  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> exemplary epitope tag

<400> 18  
Ala Ser Met Thr Gly Gly Gln Gln Met Gly Arg  
1 5 10

<210> 19  
<211> 10  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> exemplary epitope tag

<400> 19  
Ser Phe Pro Gln Phe Lys Pro Gln Glu Ile  
1 5 10

<210> 20  
<211> 12  
<212> PRT

<213> Artificial Sequence

<220>

<223> exemplary epitope tag

<400> 20

Lys Gly Phe Ser Tyr Phe Gly Glu Asp Leu Met Pro  
1 5 10

<210> 21

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> exemplary epitope tag

<400> 21

Gln Tyr Pro Ala Leu Thr  
1 5

<210> 22

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> exemplary epitope tag

<400> 22

Gln Arg Gln Tyr Gly Asp Val Phe Lys Gly Asp  
1 5 10

<210> 23

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> exemplary epitope tag

<400> 23

Glu Val His Thr Asn Gln Asp Pro Leu Asp  
1 5 10